

Installation Guide Addendum

hp StorageWorks Continuous Access EVA User Interface

Product Version: 1.2

First Edition (September 2004)

Part Number: T3661-96001

The HP StorageWorks Continuous Access EVA User Interface Installation Guide describes the procedures to install and remove the Continuous Access EVA user interface on a Windows server.

For the latest versions of storage documentation, access the HP storage web site at <http://www.hp.com/country/us/eng/prodserv/storage.html>.



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about this guide

This installation guide provides information to help you:

- Understand Continuous Access EVA installation prerequisites.
- Install and reinstall Continuous Access EVA software.
- Remove Continuous Access EVA software.
- Contact technical support for additional assistance.

“About this Guide” topics include:

- [Overview](#), page 6
- [Conventions](#), page 7
- [Getting help](#), page 8

Overview

This section covers the following topics:

- [Intended audience](#)
- [Prerequisites](#)
- [Related documentation](#)

Intended audience

This guide is intended for use by customers and HP authorized service providers who are installing Continuous Access EVA on a Windows-based server. To install Continuous Access EVA on a Storage Management Appliance, see *HP StorageWorks Continuous Access User Interface v1.1a Installation Guide*

<http://h10032.www1.hp.com/ctg/Manual/c00207476.pdf>.

Prerequisites

In addition to being familiar with Continuous Access EVA, readers should also be knowledgeable with the following:

- HP StorageWorks Enterprise Virtual Arrays
- HP StorageWorks Command View EVA

Related documentation

In addition to this guide, HP provides the following documents:

- *HP StorageWorks Enterprise Virtual Array Updating Product Software*
- *HP StorageWorks Command View EVA Getting Started Guide*
- *HP StorageWorks Command View EVA Release Notes*

These documents are available from

<http://h10025.www1.hp.com/ewfrf/wc/manualCategory?lc=en&cc=us&product=296426>

- *HP StorageWorks Continuous Access EVA v1.2 Release Notes* (T3661-96002)
- *HP StorageWorks Continuous Access EVA v1.1 Getting Started Guide* (T3031-96201)
- *HP StorageWorks Continuous Access EVA v1.1b Operations Guide* (AA-RTEHF-TE)
- *HP StorageWorks Continuous Access EVA v1.1b Design Reference Guide* (AA-RS2YG-TE)
- *HP StorageWorks Continuous Access User Interface Release Notes* (T3661-96006)
- *HP StorageWorks Continuous Access User Interface v1.1a Installation Guide* (T3031-96303)

Conventions

Conventions consist of the following:

- Document conventions
- Text symbols

Document conventions

This document follows the conventions in [Table 1](#).

Table 1: Document conventions

Convention	Element
Blue text: Figure 1	Cross-reference links
Bold	Menu items, buttons, and key, tab, and box names
<i>Italics</i>	Text emphasis and document titles in body text
Monospace font	User input, commands, code, file and directory names, and system responses (output and messages)
<i>Monospace, italic font</i>	Command-line and code variables
Blue underlined sans serif font text (http://www.hp.com)	Web site addresses

Text symbols

The following symbols may be found in the text of this guide. They have the following meanings:



WARNING: Text set off in this manner indicates that failure to follow directions in the warning could result in bodily harm or death.



Caution: Text set off in this manner indicates that failure to follow directions could result in damage to equipment or data.

Tip: Text in a tip provides additional help to readers by providing nonessential or optional techniques, procedures, or shortcuts.

Note: Text set off in this manner presents commentary, sidelights, or interesting points of information.

Getting help

If you still have a question after reading this guide, contact an HP authorized service provider or access our web site: <http://www.hp.com>.

HP technical support

Telephone numbers for worldwide technical support are listed on the following HP web site: <http://www.hp.com/support/>. From this web site, select the country of origin.

Note: For continuous quality improvement, calls may be recorded or monitored.

Be sure to have the following information available before calling:

- Technical support registration number (if applicable)
- Product serial numbers
- Product model names and numbers
- Applicable error messages
- Operating system type and revision level
- Detailed, specific questions

HP storage web site

The HP web site has the latest information on this product, as well as the latest drivers. Access storage information from <http://www.hp.com/country/us/eng/prodserv/storage.html>. From this web site, select the appropriate product or solution.

HP authorized reseller

For the name of your nearest HP authorized reseller:

- In the United States, call 1-800-345-1518
- In Canada, call 1-800-263-5868
- Elsewhere, see the HP web site for locations and telephone numbers: <http://www.hp.com>.

Installation Preparation

1

This chapter describes preparation for installing the Continuous Access EVA user interface on a Windows server. To install on a Storage Management Appliance, see *HP StorageWorks Continuous Access User Interface v1.1a Installation Guide*. Read the sections below before installing Continuous Access EVA.

- [Requirements and recommendations](#), page 10
- [Server specifications](#), page 10
- [Browser specifications](#), page 10
- [Preparation](#), page 10
- [Reading related documents](#), page 11
- [Downloading the Continuous Access EVA User Interface](#), page 11
- [Creating a CD-ROM](#), page 12

Requirements and recommendations

The following sections discuss server, browser, and software specifications. You must install Command View EVA prior to installing the Continuous Access EVA user interface. Refer to the *HP StorageWorks Continuous Access Getting Started Guide* for further information.

Server specifications

Table 2: Server specifications

Command View EVA and Storage Node Manager	<p>For installation of complete Storage Operations Manager solution, including Storage Node Manager:</p> <p>Dedicated Windows-based management server:</p> <ul style="list-style-type: none"> ■ Windows Server 2003 EE (32 bit) <ul style="list-style-type: none"> ■ Processor: 1.26 GHz (minimum) ■ Memory: 2 GB (minimum) ■ Free Disk Space: 120 MB for each installation plus 10MB for each managed array ■ Fibre Channel HBA
Command View EVA only (option)	<p>Dedicated Windows-based management server:</p> <ul style="list-style-type: none"> ■ Windows Server 2003 EE (32 bit) <ul style="list-style-type: none"> ■ Processor: 1.26 GHz (minimum) ■ Memory: 1 GB (minimum) ■ Free disk space: 120 MB plus 10 MB for each managed array ■ Fibre Channel HBA
Storage Node Manager only (optional server support)	<p>Microsoft Windows 2003 (32-bit) WebServer, Standard Server, Enterprise Server</p> <ul style="list-style-type: none"> ■ Intel processor: 1 GHz (minimum) or up to 2.4 GHz, dual processor (recommended) ■ Memory: 1 GB (minimum), 2 GB (recommended) ■ Disk space: 700 MB ■ Video resolution: 800x600

Browser specifications

The browser is used on clients to access Continuous Access EVA on the management server.

Table 3: Browser specifications

OS	Browser	JRE
Windows 2000 server	Internet Explorer 6.0.2800.1106 (128-bit)	JRE 1.4.1_03, 1.4.1_04
Windows 2000 Advanced server, SP4 (32-bit)	Internet Explorer 6.0.2800.1106 (128-bit)	JRE 1.4.1_03, 1.4.1_04

OS	Browser	JRE
Windows Server 2003 Enterprise, SP1 (IA32)	Internet Explorer 6.0.3790 (SP1)	JRE 1.4.1_03, 1.4.1_04
Windows 2000 Professional	Internet Explorer 6.0.2800.1106 (128-bit)	JRE 1.4.1_03, 1.4.1_04
Windows XP Professional	Internet Explorer 6.0.2800.1106 (128-bit)	JRE 1.4.1

Preparation

Before installing Continuous Access EVA, refer to the *HP StorageWorks Continuous Access Getting Started Guide* for the following information:

- Introduction to Continuous Access EVA
- Hardware setup and configuration
- Required software
- Licensing instructions
- Post-installation tasks

Also review the release notes for important information about installing and using the Continuous Access EVA user interface.

Reading related documents

When reading earlier versions of Continuous Access documents, please use the table below to update the terminology in those older documents.

Table 4: Later versions and added components

References to	Also apply to
Storage Management Appliance (SMA)	Management server
Command View EVA 3.2	Command View EVA 3.3
Storage Operations Manager 1.1	Storage Operations Manager 1.2
Continuous Access EVA 1.1, 1.1a, 1.1b	Continuous Access EVA 1.2
Business Copy 2.2	Business Copy 2.3
VCS 3.010	VCS 3.014 and VCS 3.020
SMI-S 3.2	SMI-S 3.3

Downloading the Continuous Access EVA User Interface

The Continuous Access EVA user interface is available by download from the Continuous Access EVA product page web site.

1. Visit <http://h18006.www1.hp.com/products/storage/software/conaccesseva/index.html>.
2. Under Product information, click **Software & drivers**.
3. Under Software Management, click the **download** link next to HP StorageWorks Continuous Access EVA 1.2.

Creating a CD-ROM

After downloading the file, HP recommends backing up the file and the extracted files to CD-ROMs. You can use CD-ROMs to install the Continuous Access EVA user interface. Keep CD-ROMs in several locations so that you can install the Continuous Access EVA user interface later without re-copying or downloading the file.

HP recommends making a CD-ROM for use in rebuilding those platforms containing the Continuous Access EVA software and/or to retain with Continuous Access-enabled hosts.

To use the CD-ROM for installation, place the newly created CD-ROM in the CD drive. The CD-ROM is now ready and the product software is positioned for installation.

Note: All files must be at the root of the CD and all files must accompany setup.exe for the installation to run.

Installing the Continuous Access EVA User Interface

2

This chapter describes how to install the Continuous Access EVA user interface on a Windows-based server. Ensure that you have read and successfully completed all steps in “[Installation Preparation](#)” starting on page 9.

Note: See “[Installation Troubleshooting](#)” on page 29 for Continuous Access EVA user interface installation troubleshooting information.

Installation

Complete the following procedure to install Continuous Access EVA.

1. Navigate to the `setup.exe` file.
2. Double-click the **setup.exe** file to begin installation.

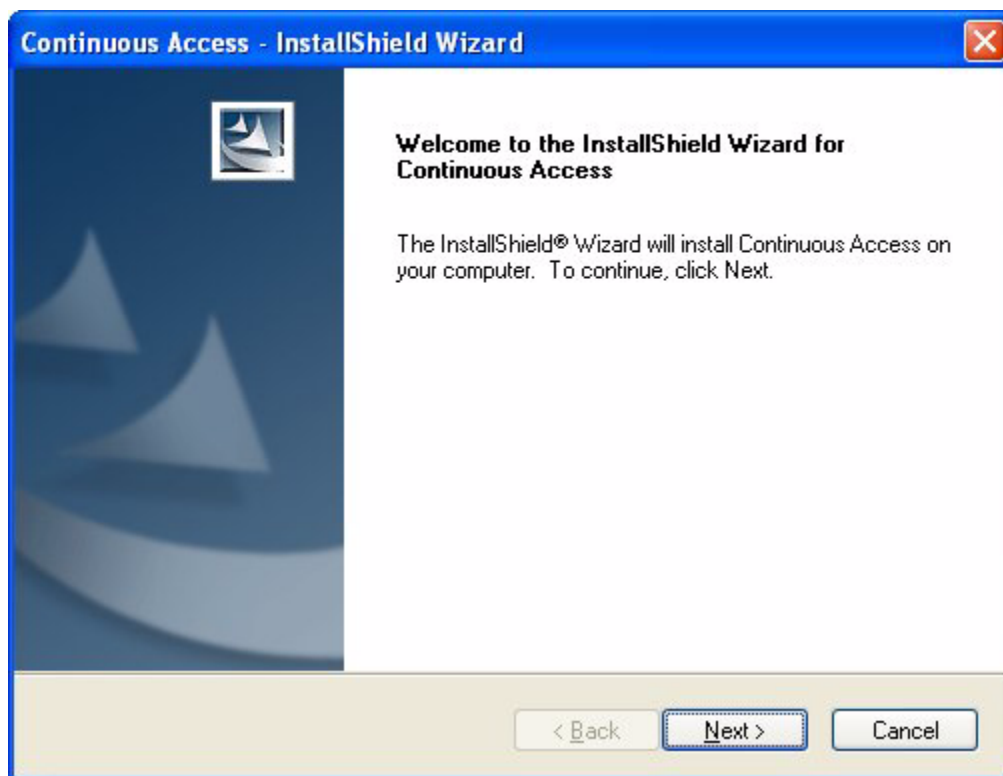


Figure 1: Introduction

3. Click **Next**.

Note: Click **Cancel** at any time during the installation to exit the installation.

4. Carefully review the Continuous Access EVA License Agreement before continuing with the installation.

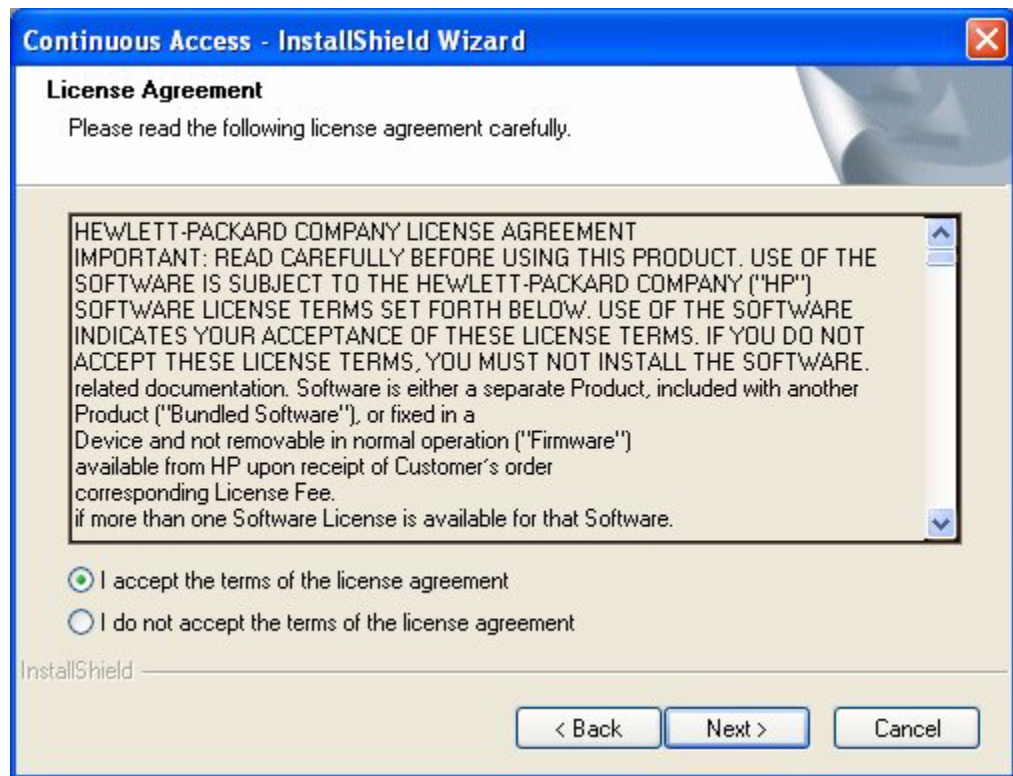


Figure 2: License agreement

5. Select **I accept the terms of the license agreement** to continue the installation.
6. Click **Next**.

The Ready to Install the Program screen displays.

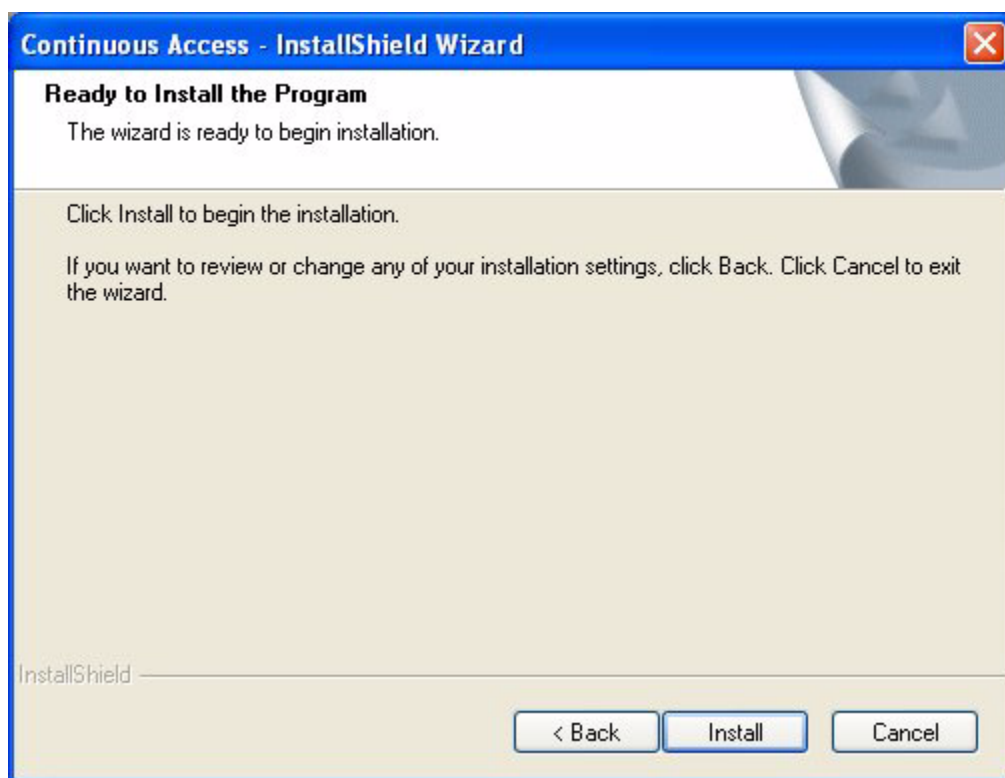


Figure 3: Ready to Install the Program screen

7. Click **Install**.
8. Click **Finish**.
9. Upon completion, verify that Continuous Access EVA is installed. In the Control Panel, double-click **Add/Remove Programs**. **Continuous Access 1.2** should appear.
The Continuous Access EVA software is now installed.
10. Change the default password immediately for increased security. Refer to the online help for instructions.
 1. On the hp OpenView storage management appliance page, click **Devices**.
 2. Click **command view eva** on the new toolbar that displays.
 3. Click Yes on any Security messages that display.

Launching Continuous Access EVA

To launch the Continuous Access EVA user interface on the management server:

1. Navigate to `https://<hostname>:2381/`.
The System Management Homepage Login displays.
2. Enter your User name and Password and then click **LOGIN**.

Note: Your default user name and password combination will be administrator | administrator.

3. Under Other Agents, right-click **Continuous Access EVA** and choose **Open in a New Window** from the drop-down list.

The hp StorageWorks Continuous Access EVA window displays.

4. Click **Yes** on any Security messages that display.

Obtaining the JRE

The Continuous Access EVA user interface uses version 1.4.2_02 of the Java Runtime Environment (JRE). Please use the provided JREserver CD. If not previously installed, the Continuous Access user interface will attempt to obtain the JRE from the Sun web site when it is launched for the first time. If the web site cannot be accessed, you may be left with a blank screen or see an error message. Should this occur, you must obtain this version of the JRE and install it manually.

If you choose to manually install the JRE, it can be obtained from the following web site:

<http://java.sun.com/products/archive/index.html>

The JRE is downloaded as an executable file. Running the file will install the JRE.

Scanning for EVA Storage Systems

The first time you open the Continuous Access EVA user interface on a Windows Management Server, the Storage Systems pane is empty. You must perform a Rescan SAN operation to populate the Storage Systems pane with the EVA storage.

1. Click the **Refresh** button in the session pane.
2. Choose **Rescan SAN** and then click OK.

A Rescan SAN operation may take over 30 minutes or longer depending on the separation distance between the management server and any remote arrays and the number of objects within those arrays. (Refer to the “EVA Management Versus Distance” section of the *HP StorageWorks Continuous Access EVA Design Reference Guide*.)

After scanning, the Continuous Access user interface displays discovered storage systems in the Storage Systems pane.

Note: Perform a Rescan SAN operation for each management server where the Continuous Access EVA user interface does not display any icons in the Storage Systems pane.

Rescan of the SAN after VCS upgrade

The Continuous Access EVA user interface can manage storage systems running VCS. If you have been using the Continuous Access user interface to manage a storage system running VCS 3.0 and then upgrade VCS on that storage system, you will need to perform a Rescan SAN operation so that the Continuous Access EVA user interface can read the new VCS version and enable the additional VCS functionality provided by that new version.

Using help for the Continuous Access EVA user interface

After you have launched the Continuous Access user interface, refer to the online help for detailed information about using the program. To start online help, click the question mark icon at the top right of the Continuous Access EVA user interface page.

Post-Installation Changes

3

This chapter covers the following topics:

- [Enabling the Continuous Access EVA User Interface to receive events](#), page 19
 - [About the maximum number of events](#), page 23
 - [Setting the maximum number of events](#), page 23
- [Changing the log refresh interval](#), page 23
- [Enabling backup capabilities for the Continuous Access EVA User Interface](#), page 24
- [Modifying the *java.policy* file](#), page 24
- [Modifying passwords](#), page 25

Enabling the Continuous Access EVA User Interface to receive events

To enable the Continuous Access user interface to display events, the following procedures must be performed on each HSV storage system.

1. Launch a Web browser from a client and browse to the Windows management server.
2. Choose **Devices**.
3. Choose **Continuous Access EVA**.
4. Select the desired storage system in the navigation pane.

The Initialized Storage System Properties window opens, as shown in Figure 4.

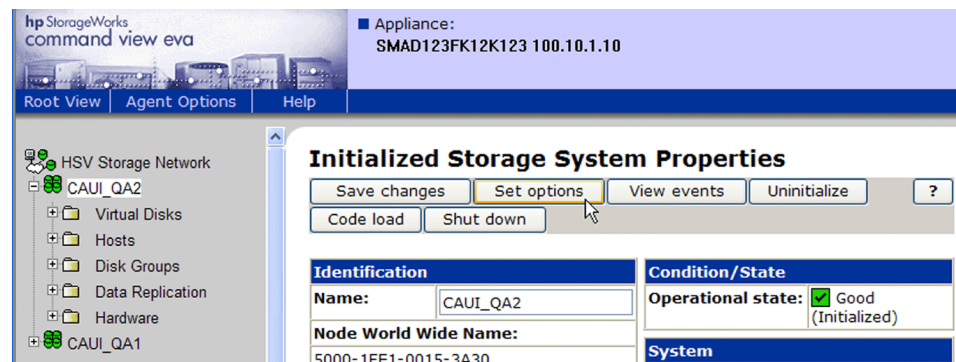


Figure 4: Initialized Storage System Properties page

5. Click **Set Options**.

The System Options window opens, as shown in Figure 5.

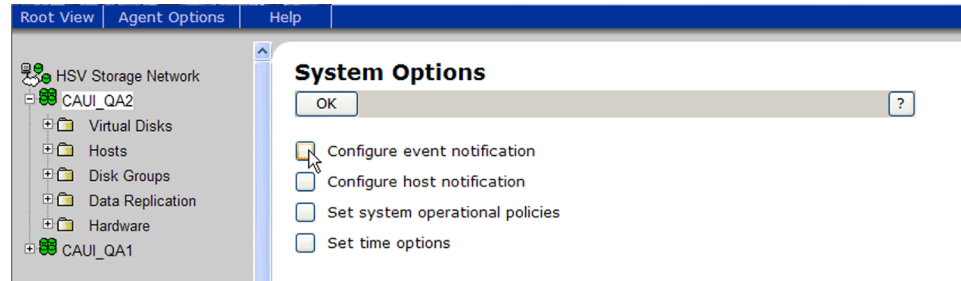


Figure 5: Systems Options window

6. Click **Configure event notification**.

The Configure Event Notification window opens, as shown in Figure 6.

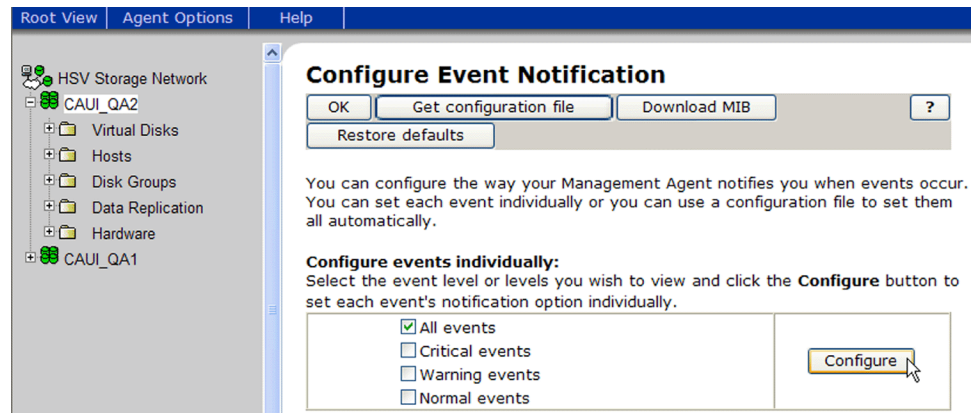


Figure 6: Configure Event Notification window

7. Ensure that **All Events** is checked under **Configure events individually**, and then click **Configure**.

The Set Event Notifications Options window opens, as shown in Figure 7.

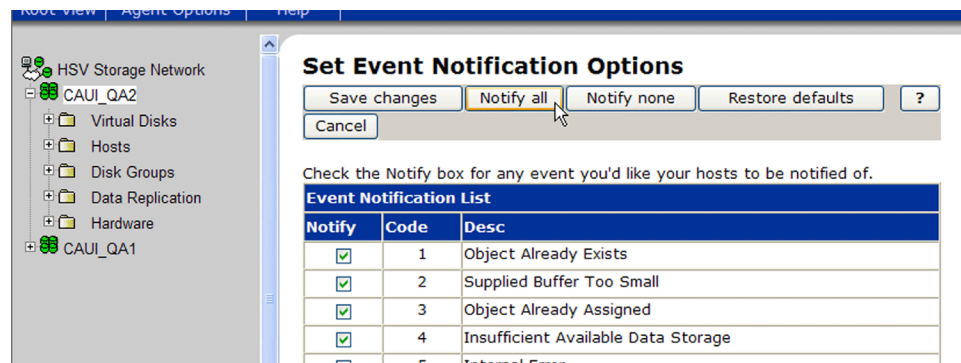


Figure 7: Set Event Notification Options window

8. Choose or clear events.

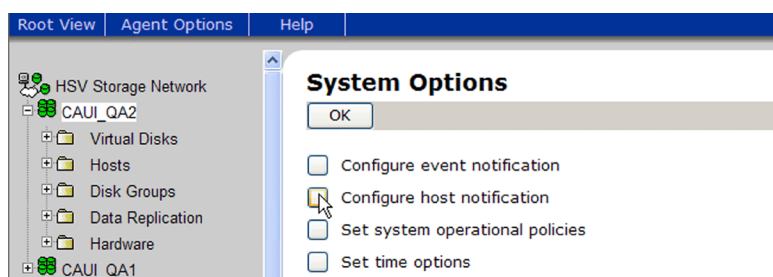
The Windows management server can be configured to be notified of over 1,000 possible events in your SAN. However, the Storage System event codes that are pertinent to the Continuous Access user interface are listed below.

Table 5: Event codes

9 46 0 e	9 cd c3 5	c f 0 c
9 47 0 e	9 ce 0 5	c 10 0 c
9 71 0 f	9 cf 41 5	c 11 0 c
9 72 0 f	9 d3 51 5	c 12 0 c
9 73 0 f	9 d4 0 5	c 17 63 c
9 74 0 f	9 d5 0 5	c 18 64 c
9 75 0 f	c 3 0 c	c 1a 0 c
9 76 0 f	c 4 5f c	c 1b 5f c
9 77 0 f	c 5 60 c	c 1c 61 c
9 78 0 f	c 6 60 c	c 1d 0 c
9 79 0 f	c 7 5f c	c 1e 5f c
9 7a 0 f	c 8 61 c	c 1f 0 c
9 c8 51 5	c 9 62 c	c 15 5f c
9 c9 51 5	c a 0 c	c 20 65 c
9 ca 51 5	c c 0 c	c 21 66 c
9 cc 51 5		

Note: Hexadecimal SC event codes are found in the Desc column of the Event Notification List table, and they should not be confused with decimal codes in the Code column. Beginning with decimal Code 28000, you will see corresponding SC Event Codes listed in the Desc column.

9. Click **Save Changes**.
10. Select the same storage system from the navigation pane as the one you selected in step 4.
The Initialized Storage System Properties window opens, as shown in Figure 4.
11. Click **Set Options**.
The System Options window opens, as shown in Figure 8.

**Figure 8: Systems Options window**

12. Click **Configure host notification**.
The Configure Host Notification window opens, as shown in Figure 9.

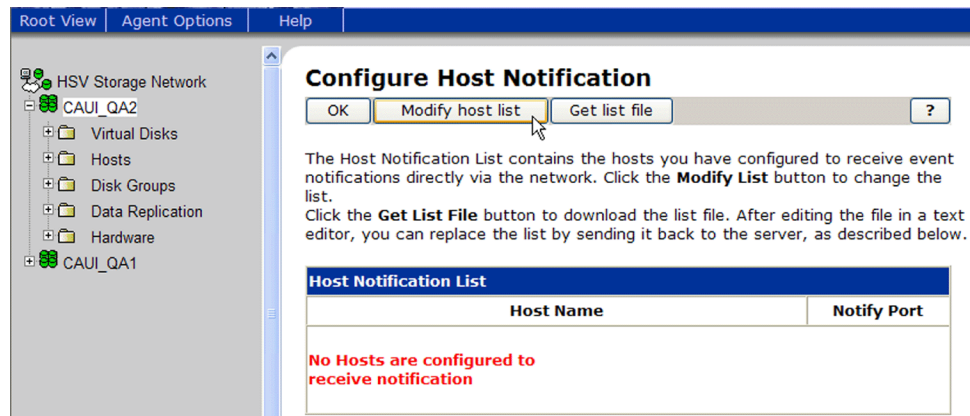


Figure 9: Configure Host Notification window

13. Click **Modify host list**.

The Modify Host Notification List window opens.

14. Locate the section named **Add a host to the list** in the Host Name field and enter the IP address or host name where the Continuous Access user interface resides (this may be the same appliance that is running Command View EVA). Under Notify Port enter the number **163**. For example, in [Figure 10](#), a host has been entered with a TCP/IP address of 100.10.1.10 with a notify port of 163.

Note: Enter the IP address of every Windows management server that you want to receive event notifications. If you have configured other management servers as backups, enter their IP addresses as well. That way all will receive notifications when powered up and connected to the network.

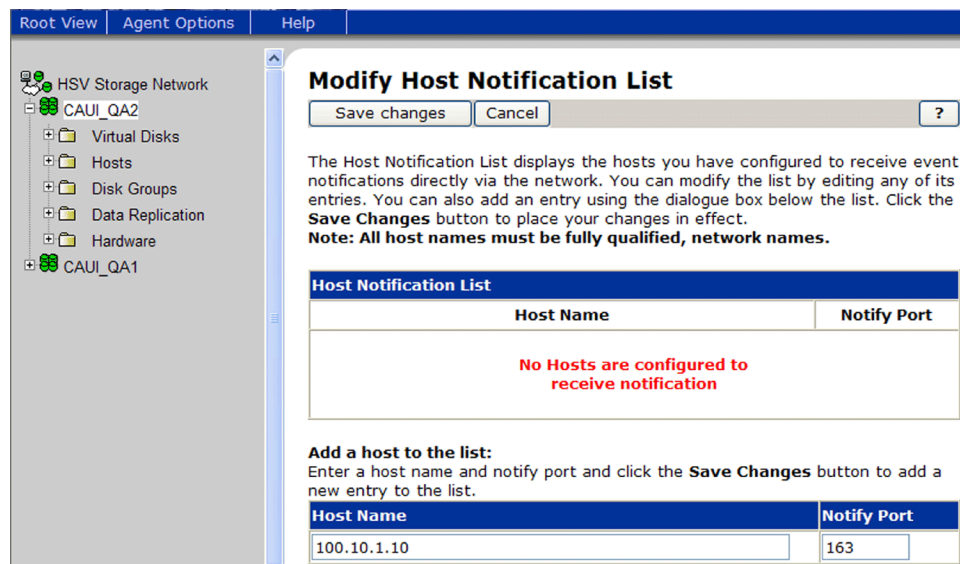


Figure 10: Modify Host Notification List window

15. Click **Save Changes**.

Repeat the procedure for each storage system on your Continuous Access EVA fabric.

About the maximum number of events

There is a maximum number of events that the Continuous Access user interface will display. After this maximum is reached, each new event results in the oldest event being discarded. By default this limit is set at 50,000 events.

Setting the maximum number of events

To set the maximum number of events:

1. Log in to the active Windows management server using the console interface or terminal services.
2. Open the *drm.properties* file with a text editor.
This file is found on the management server at C:\Program Files\Compaq\SANworks\Modules\drm\properties\.
3. Change the **maximumNumberOfEvents** entry to 2000, or the desired limit.
4. Save the file.
5. Reboot the Windows management server.

The Continuous Access user interface is now configured to track a maximum of 2000 events.

Changing the log refresh interval

The log is refreshed at a predefined interval. The default interval between polling cycles is two hours (7,200,000 milliseconds). To change the polling interval, modify the **logPanelRefreshInterval** token in the *drm.properties* file.

Note: The interval value is entered in milliseconds.

To change the log refresh interval:

1. Log in to the Windows management server.
2. Open the *drm.properties* file with a text editor.
This file is found on the SMA at C:\Program Files\Compaq\SANworks\Modules\drm\properties\.
3. Change the **logPanelRefreshInterval** to the desired setting. Remember the setting is in milliseconds.
4. Save the file.
5. Reboot the Windows management server.

The Continuous Access user interface is now configured to poll for logging activity at the set interval.

You can also perform an “on-demand” refresh. To refresh the log:

1. Click the **Refresh** button in the session pane.
2. Choose **Refresh Display**, and then click **OK**.

The Continuous Access user interface updates the logging information displayed on the page, and resets the time of the last update, which is shown at the bottom of the tab.

Note: Performing an on-demand refresh does not affect the normal polling interval.

Enabling backup capabilities for the Continuous Access EVA User Interface

Using the Maintenance menu on the menu bar of the **Manage** tab of the Continuous Access user interface, you can back up and restore the Continuous Access database. This database does not contain or preserve any state information for the EVA, but it does save configuration information about the copy sets, DR groups, managed sets, and storage system folders that you have created using the user interface.

Before the Continuous Access user interface can back up the Continuous Access database, you must grant permission to Java™ to write to local or network file systems. You grant these rights by modifying the *java.policy* file on your local computer.

Modifying the *java.policy* file

To modify the *java.policy* file:

1. Locate the *java.policy* file on your hard drive by using the computer's search function. This is generally in the `\lib\security` subdirectory which is under the subdirectory where you installed the Java Runtime Environment (JRE) or Java Development Kit (JDK).
2. Open the file with a text editor.

Your *java.policy* file should look similar to the following:

```
// Standard extensions get all permissions by default

grant codeBase "file:${java.home}/lib/ext/*" {
    permission java.security.AllPermission;
};

// default permissions granted to all domains

grant {
    // Allows any thread to stop itself using the java.lang.Thread.stop()
    // method that takes no argument.
    // Note that this permission is granted by default only to remain
    // backwards compatible.
```

Figure 11: Initial lines of a sample *java.policy* file

3. Insert the following **grant** line at the top of the program, as follows:


```
grant {  
    permission java.security.AllPermission;  
};  
  
// Standard extensions get all permissions by default  
  
grant codeBase "file:${java.home}/lib/ext/*" {  
    permission java.security.AllPermission;  
};  
  
// default permissions granted to all domains  
  
grant {  
    // Allows any thread to stop itself using the java.lang.Thread.stop()  
    // method that takes no argument.  
    // Note that this permission is granted by default only to remain  
    // backwards compatible.  
};
```

Figure 12: A `java.policy` file with grant line added

4. Save your modified `java.policy` file.

The Continuous Access user interface can now write backup files to local and network drives.

Modifying passwords

Refer to the online help for information about modifying passwords.

Uninstalling the Continuous Access EVA User Interface

4

This chapter describes how to uninstall the Continuous Access EVA user interface from a Windows server.

Note: Command View EVA must be removed before removing the Continuous Access EVA user interface.

To remove this software, use the following procedure:

1. Select **Start > Settings > Control Panel**.
2. Double click **Add/Remove Programs**.
The **Add/Remove Programs** dialog displays.
3. Select **Continuous Access EVA 1.2** from the list, and then click **Change/Remove**.
4. On the Welcome screen, check **Remove** and then click **Next**.
5. Click **Yes** on the Do you want to completely remove the selected application and all of its components prompt that appears.

The Continuous Access EVA is now removed.

Installation Troubleshooting



This chapter describes known problems and suggested resolutions for troubleshooting the installation. Topics include:

- [Command View EVA not installed](#)
- [The Continuous Access EVA User Interface is not on Microsoft Windows Server 2003](#)

Command View EVA not installed

Description: The Continuous Access EVA user interface will not install if Command View EVA is not present.

Resolution: Install Command View EVA before installing the Continuous Access EVA user interface.

The Continuous Access EVA User Interface is not on Microsoft Windows Server 2003

Description: The Continuous Access EVA user interface can be installed only on Windows Server 2003.

Resolution: Ensure that the kit is being installed on Windows Server 2003.

Please refer to the *HP StorageWorks Continuous Access EVA Release Notes* (T3661-96002) and the *HP StorageWorks Continuous Access EVA User Interface Release Notes* (T3661-96006) for the latest information.

Operational troubleshooting

B

This chapter describes known problems and suggested resolutions for troubleshooting operations. Topics include:

- [Access denied message upon installation](#)
- [Unable to find the server error messages](#)
- [Logging and events](#)
- [Suspend displayed until full copy completed](#)
- [Final steps](#)

If you encounter installation errors, click the .exe file again and select the Repair option that appears.

Access denied message upon installation

When attempting to install the Continuous Access user interface from a Storage Management Appliance (SMA), you may encounter an `Access Denied` message after selecting the SWP file and clicking **Next**. In this situation, delete all temporary files and folders located in `C:\TEMP`, and then restart the installation.

Unable to find the server error messages

When starting the Continuous Access user interface, you may encounter the following error message: `Unable to find the server`.

If this happens, try the following actions:

- Change the address of the management server from “localhost” to the TCP/IP address.
This message is displayed if you try to run the Continuous Access user interface from the browser on the console of your management server. Because the Continuous Access user interface is configured to run from a client workstation, you need to modify the way you start the Continuous Access user interface if you want to run it from the management server.

To run the Continuous Access user interface from the console of the management server:

1. Start your browser from the management server console.

The management server home page opens.

2. Click **Tools**.
3. In the address box of your browser, change the localhost setting to the TCP/IP address of the management server.

4. Click **continuous access**.

The Continuous Access user interface starts.

- Close and reopen all browser connections to the management server. This can fix the error when caused for the following reasons:
 - The browser's caching strategy prevents the browser from communicating with processes running on the management server.
 - The Continuous Access EVA user interface server is still starting. The Continuous Access user interface waits for Command View EVA to start first.
 - The "unable to find the server" dialog box appears behind a Continuous Access user interface browser window. Respond to the message and reopen the application to clear the condition.
 - The Continuous Access user interface is being accessed from the management server. This is not supported. Close the browser window and browse to the application from another client.
- Verify that Command View EVA is installed on the management server. When the Continuous Access EVA user interface starts, it displays this message if it cannot find Command View EVA. If Command View EVA is not installed on the management server, install it before starting the Continuous Access user interface.
- Verify that the SANworks Module Loader is present as a service on the management server.

If the SANworks Module Loader is not present, reboot the management server. After rebooting, if the SANworks Module Loader is still not present, uninstall and reinstall the Continuous Access user interface.

If the SANworks Module Loader is present as a service, manually stop and restart it. To do this:

1. Exit all browser connections to the management server.
2. Log in to the management server using the console interface or terminal services.
3. From the management server desktop, click **Start > Settings > Control Panel > Administrative Tools > Services**.

The Services window opens.

4. Right-click the **SANworks Module Loader** service and then click **Stop**.
5. The status changes from *Started* to *blank*.
6. Right-click the **SANworks Module Loader** service and then click **Start**.

The status changes from *blank* to *Started*.

The Continuous Access user interface is ready to be restarted.

- Delete your database if you see the following messages in the *message.log* file, which is found on the management server in the folder `C:\Program Files\Compaq\SANworks\Modules`:

```
Error: Failed to load from database after rollback!
Caught exception:
javax.transaction.TransactionRolledbackException:
Failed to read from database:
```

To delete the Continuous Access user interface database:

1. Log in to the active management server using the console interface or terminal services.

2. Stop the SANworks Module Loader (see steps 2, 3, and 4 in the procedure above for detailed instructions on how this is done).
3. Browse to the C:\Program Files
 \Compaq\SANworks\Modules folder and delete the file named message.log.
 If folder options on the management server are set to **Hide file extensions for known types**, this file is displayed as message.
4. Browse to each of the following four folders and delete all files with a .db extension:
 C:\Program Files
 \Compaq\SANworks\Modules\drm\database
 C:\Program Files
 \Compaq\SANworks\Modules\drm\database\backup
 C:\Program Files
 \Compaq\SANworks\Modules\nexus\database
 C:\Program Files
 \Compaq\SANworks\Modules\nexus\database\backup

Caution: Do not delete the backup folders in either of the two database folders.

5. Reboot the management server.
 After restarting the management server, start the Continuous Access user interface normally.

Logging and events

The following issues relate to Logging and Events.

View Log Activity tab may require manual refresh

The Continuous Access user interface updates the View Log Activity tab every two hours by default or at the time interval specified in the `nexus.properties` file (see “Changing the Log Refresh Interval” in the Continuous Access user interface online help).

This update to the Continuous Access user interface, however, is principally designed to automatically detect new logging activity; it is not the same as performing a Refresh Display operation. The automatic update displays cached information about the status of logging activities. Consequently, logging messages that are not a first occurrence may contain outdated information.

To force the Continuous Access user interface to actively poll for the most recent status of logging activity, perform a Refresh Display operation.

Multiple events

The Continuous Access user interface may display what appear to be duplicate events. This is expected behavior in the following cases:

- When you operate on a DR group, the storage systems generates an event for each half of a DR group. In some cases, it is clear that one event is for the source and the other is for the destination; however, in some cases the events are labeled identically.
- If you have configured active-active management servers, both management servers generate events in the SAN. Consequently, duplicate entries for the same event display in both management server's event logs.

If the time stamps of multiple events do not match, refer to Chapter 5 of the *HP StorageWorks Continuous Access EVA V1.1B Operations Guide*.

Suspend displayed until full copy completed

When a DR group fills available disk space with its log, the members of the DR group are marked for a full copy. If you use the Continuous Access user interface to resume the link (or data replication), the properties on the DR group still display the state of the DR group as suspended until the full copy is complete.

About commandlog.log

The user interface writes messages about internal processes to the `commandlog.log` file. This file contains all internal message traffic. While this file is viewable to customers, it is not meant for customer diagnostics. The size of this log file is set by default to 5 MB. When the log file fills up, it is either saved as `old_commandlog.log` or it overwrites the existing `old_commandlog.log` file. Afterwards, a new (and empty) `commandlog.log` file is written to.

You can configure the `commandlog.log` file size in the entry called `LogSize` in the `nexus.properties` file in the folder `C:\Program Files\Compaq\SANworks\Modules\nexus\properties`. The entry is in bytes. For example, 5000000 (the default) is equal to 5 MB. There are also two entries in `nexus.properties` that let you change the name of the `commandlog.log` file and the name of the overflow log file.

Final steps

If all other actions fail, stop the Continuous Access EVA User Interface and reboot the management server. This will not affect EVA operation but may clear problems.

Please refer to the *HP StorageWorks Continuous Access EVA Release Notes* (T3661-96002) and the *HP StorageWorks Continuous Access EVA User Interface Release Notes* (T3661-96006) for the latest information.